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A New Species of the Genus *Awas* (Coleoptera, Staphylinidae, Pselaphinae) from the Malay Peninsula

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Abstract A new pselaphine species, *Awas rajah* sp. nov. is described from Endau-Rompin State Park, Pahang, Malay Peninsula.

Key words: Coleoptera, Staphylinidae, Pselaphinae, *Awas*, Malaysia, new species.

Introduction

The genus *Awas* is an eccentric genus described by Löbl (1994) from the Malay Peninsula. It is characterized by the large and elongate body, the distinctly prolonged neck and the stout legs. As the result of an comparison with some genera of the supertribe Goniaceritae, Löbl (1994) classified it into the tribe Arnylliini. Later, Nomura (1995) described *A. shunichii* from Taiwan. Up to the present, two species have been known in this genus. Behavior and habitat of the species in this genus have been little known, but recently, Sugaya & Nomura (2003) reported a habitat of *A. shunichii* in Taiwan with its additional records.

The authors discovered a new species of this genus in Endau-Rompin State Park, Pahang, southern part of the Malay Peninsula. It was collected by flight intercept traps. In the present study, the new species of *Awas* is described and the collecting method is noted.

Materials and Methods

All the materials were collected by flight intercept traps (abbreviated to FIT below) set on the ground of the tropical rainforest in Endau-Rompin (Fig. 5). The FIT consists of a barrier and a receiver, both made of transparent plastic sheet of 0.1 mm in thickness. The barrier is pentagonal sheet sized 1,420 mm wide×940 mm high. The receiver is transverse V-shaped and fitted to the lower margin of the barrier. The collected insects were preserved in water of the central pool of the receiver with a spoon of sorbic acid powder against decay. After picked up and sorted, they were transferred to 70% ethanol. The same type of FIT is also shown in NOMURA & IDRIS (2003).

Dissections were made using standard techniques, genitalia and hind wings were mounted in Canada balsam on an acetate piece on the same pin with the specimen. Leica MZ Apo microscope was used for observation and drawing in this study.

Genus *Awas* LÖBL, 1994

Awas LÖBL, 1994, Revue suisse Zool., **101**: 686.—— NOMURA, 1995, Spec. Bull. Jpn. Soc. Coleopterol., Tokyo, (4): 359. Type species: *Awas giraffa* LÖBL, 1994.

Remarks. This genus is closely allied to the genus *Harmophorus* MOTSCHULSKY which is the senior synonym of the type genus *Arnyllium* REITTER. It is easily distinguished from *Harmophorus* by having the elongate body, the strongly prolonged head and the basally constricted abdomen.

Key to the Species of the Genus *Awas*

1. Body large (4.2 mm in length); eyes reniform and roundly convex; elytra shallowly concave in basimedian part; each elytron with a round basimedian fovea . . . . *A. shunichii* NOMURA.

— Body small (3.3–3.6 mm in length); eyes U-shaped, very weakly convex; postgenae each prolonged anterolaterally onto posterolateral margin of eye; elytra normally convex in basimedian part; each elytron with or without indistinct basimedian fovea . . . . 2.

2. Scutellum scarcely exposed; elytron without basimedian fovea; abdominal segment IV with semicircular process on ventromedian nodule . . . . *A. giraffa* LÖBL.

— Scutellum exposed in small part between elytral bases; elytron with an indistinct basimedian fovea; abdominal segment IV without semicircular process on ventromedian nodule . . . . *A. rajah* sp. nov.

Awas rajah sp. nov.

(Figs. 1–4)

Etymology. The specific name *rajah* means “king” in Malay.

Holotype: ♂, Endau-Rompin Nat. Res., FIT st. 2: fogging site, Pahang, Malaysia, 6∼9–VII–2003, S. NOMURA (UKM). Paratype: 1♂, same data as holotype (NSMT).

Male (Fig. 1). Body length 3.30–3.57 mm, width 0.88–0.90 mm. Very elongate, thick, color reddish brown and shiny, mouthparts and tarsi yellowish.

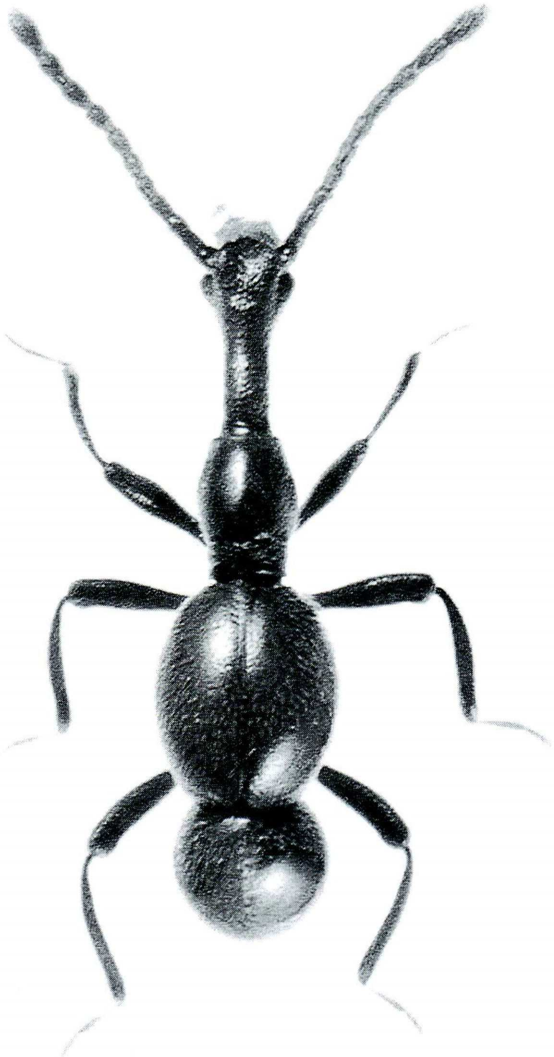

Fig. 1. *Awas rajah* sp. nov., male habitus.

Head elongate, about 2.5 times as long as wide, cylindrical in basal half, then broadened and thickened anteriorly in anterior half, widest at anterior 2/7, covered with short pubescence; clypeus expanded anteriorly, arcuate on anterior margin, frons strongly convex on antennal bases, weakly concave along median line, densely covered with coarse punctures; vertex flattened, with a pair of indistinct dorsal tentorial pits at middle of head; neck narrowed, cylindrical, sparsely covered with finer punctures than in frons, almost glabrous in basal 1/10 of head on dorsal side, with two glabrous, trans-

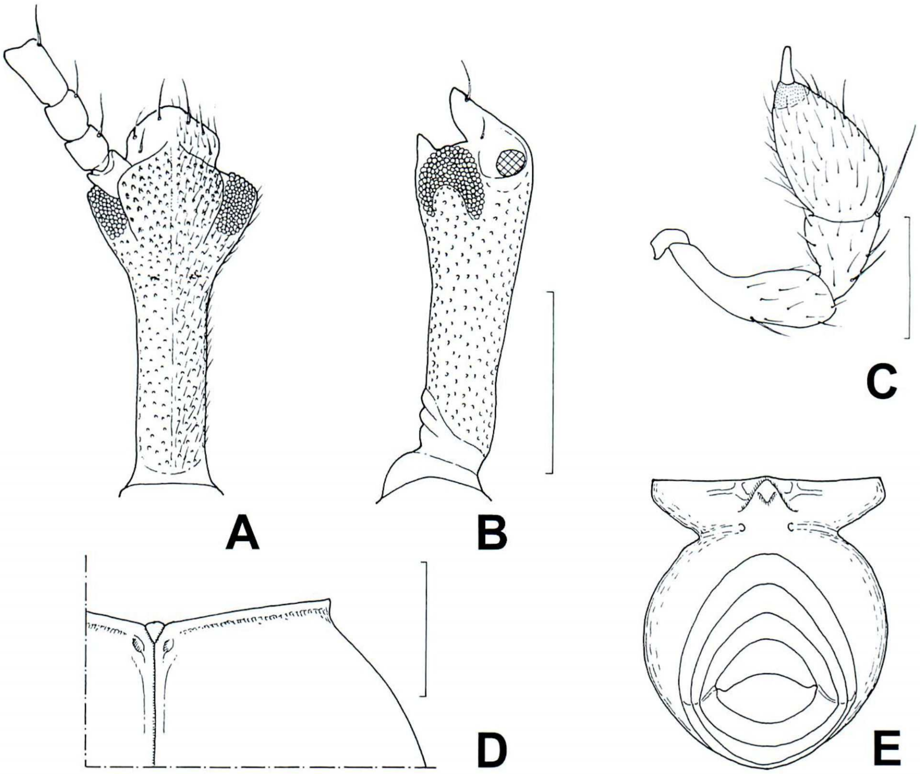

Fig. 2. *Awas rajah* sp. nov. —— A, Head and left antennal segments I to IV (pubescence excluded on left side); B, head in lateral view (pubescence excluded); C, left maxillary palpus; D, elytral base; E, abdominal segments IV to VIII in ventral view. Scale for A, B, E: 0.5 mm; scale for C: 0.1 mm; scale for D: 0.2 mm.

verse swellings on basiventral side; postgenae each strongly expanded anteriad onto posterolateral side of eye. Eyes very large, U-shaped in lateral view, scarcely convex on anterolateral side. Maxillary palpi very short; palpal segment I short, curved; II elongate, thickened distally, weakly curved near middle; III short, triangular, with a long and bold seta at external corner; IV the largest, fusiform, 1.8 times as long as wide; palpal spine elongate and conical, about 1/5 as long as IV. Antennae elongate, slender, 1.44–1.54 mm in length, densely with short setae; antennal segment I curved near middle, cylindrical in apical half; II short, cylindrical, as long as wide; III slightly longer than II, subcylindrical; IV to VI subequal, each slightly larger than III, 1.2 times as long as wide; VII to X subequal, each slightly longer than IV; XI the largest, nearly ovoid, widest at apical 2/5, twice as long as wide; relative length (width) of each segment to width of segment I from base to apex: 1.1 (1.0) : 1.0 (1.0) : 1.1 (1.0) : 1.3 (1.0) : 1.3 (1.0) : 1.3 (1.0) : 1.6 (1.1) : 1.6 (1.1) : 1.6 (1.1) : 1.6 (1.1) : 2.5 (1.2).

Pronotum slightly wider than head, 1.3–1.4 times as long as wide, subcylindrical,

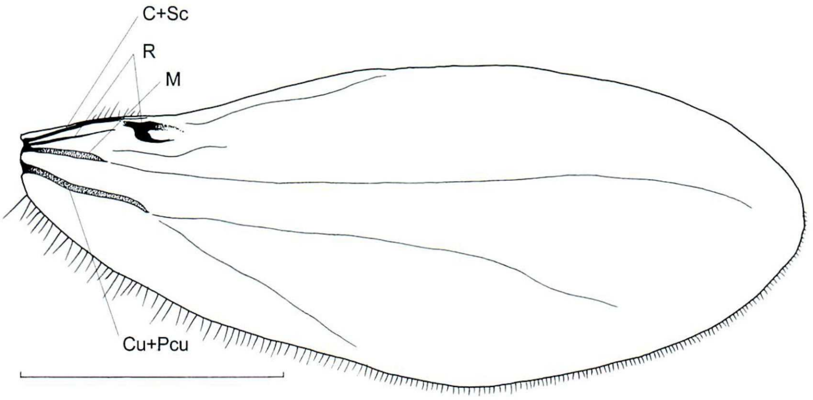

Fig. 3. Right hind wing of *Awas rajah* sp. nov. Scale: 1 mm.

swollen near middle, with a transverse sulcus at basal 1/3, sparsely covered with minute punctures in anterior 2/3, then with coarse punctures behind transverse sulcus. Scutellum exposed in very small part between elytral bases (Fig. 2 D). Metasternum simply convex on ventral surface, covered with short, dense pubescence. Elytra about 1.1 times as long as wide, ovoid in dorsal view, convex on dorsal surface, widest near middle, limbate at base, uniformly covered with short pubescence; each elytron with an indistinct basimedian fovea, short, indistinct adsutural sulcus in basal 1/4 (Fig. 2 D). Hind wings developed (Fig. 3), 3.10 mm in length from wing base to tip, 1.21 mm in maximum width; veins C+Sc, R, M, Cu+Pcu weakly sclerotized in basal part of the wing, sometimes untraceable in apical part; C+Sc short, attached to anterior margin at apical part; R very thin in basal part, strongly broadened and strongly sclerotized just inside first transverse fold; M short and less sclerotized than in R, followed by very thin longitudinal wrinkle reaching near apex of wing; Cu+Pcu slightly shorter than R, about as broad as M, followed by very thin, divergent two longitudinal wrinkles in apical part of wing.

Abdomen (Fig. 2 E) slightly wider than long, subspherical, convex on dorsal surface, uniformly covered with short pubescence; abdominal segment IV predominantly large, strongly constricted at base, with a small, triangular ventromedian nodule, a deep transverse sulcus reaching just outside of ventromedian nodule, without any marking between tergite and sternite; segments V to VII successively shortened posteriad, each very short, annular, densely with pubescence in posterior part; VIII small, nearly circular in ventral view (Fig. 2 E).

Male genitalia (Fig. 4) large, weakly sclerotized, parameres not demarcated; median lobe ovoid, with a broad and transverse ventral sclerite, a pair of L-shaped dorsal sclerites in apical part and cordiform ventroapical nodule (Fig. 4 A); endophallus (Fig. 4 D) nearly symmetrical, composed of two pairs of long and slender spines, with many hair-like structures on ventral side of ventral pair of spines.

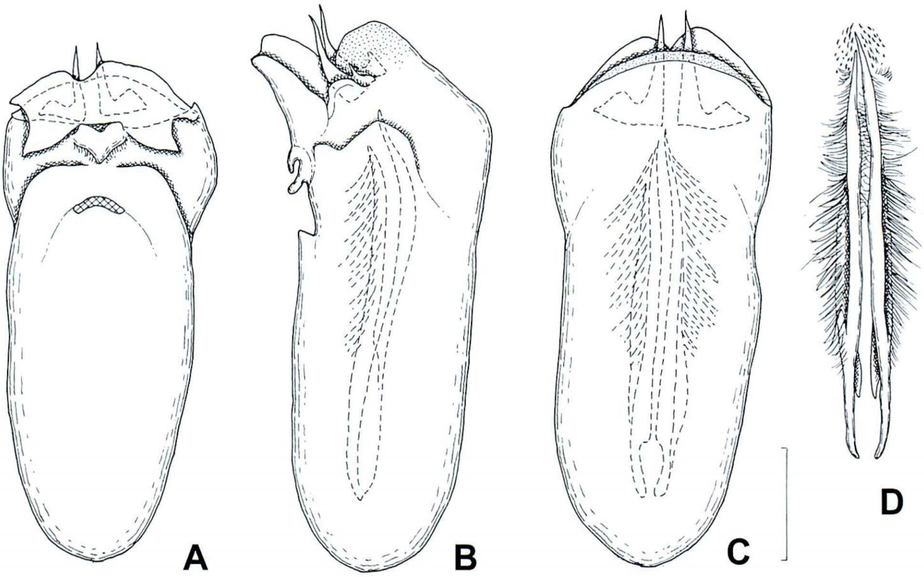

Fig. 4. Male genitalia of *Awas rajah* sp. nov.; A, ventral view; B, lateral view; C, dorsal view; D, endophallus in dorsal view. Scale: 0.1 mm.

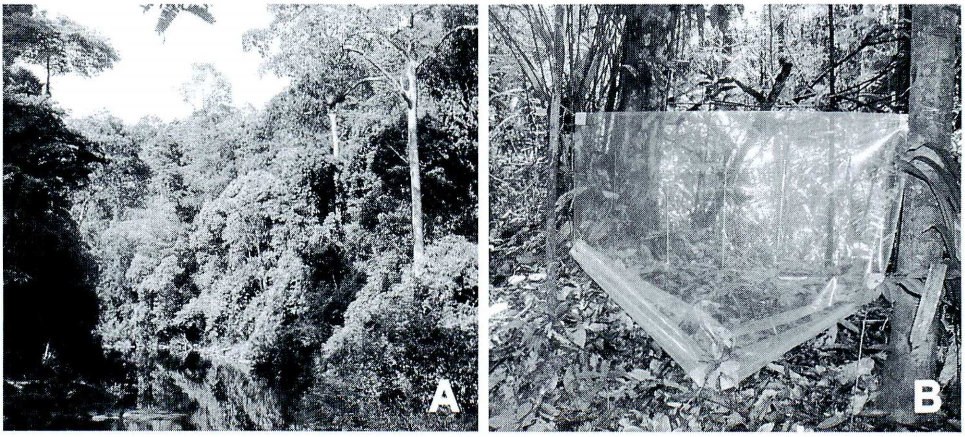

Fig. 5. A, A view of Endau-Rompin State Park; B, a FIT set on the ground of the rainforest in Endau-Rompin.

Female. Unknown.

Distribution. Malay Peninsula.

Remarks. This new species is very similar to the type species of the genus *Awas giraffa* LÖBL described from Fraser's Hill, Malay Peninsula. However, it is separated from *A. giraffa* by having the exposed scutellum, the elytron with an indistinct basimedian fovea and some characters of the male genital structures. The male genitalia of this species is characterized by the L-shaped paird dorsal sclerites at apical part of the median lobe, the cordiform nodule in the ventroapical part and the endophallus composed of four long and slender spines with many hair-like structures.

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要　約

野村周平・A. G. IDRIS：マレーシア産キリンアリヅカムシ属の1新種（コウチュウ目ハネカクシ科アリヅカムシ亜科）. —— キリンアリヅカムシ属*Awas*は，オノヒゲアリヅカムシ上族，Arnylliini族に所属し，マレー半島および台湾から各1種が知られている．筆者らはマレー半島パハン州，エンダウ・ロンピン州立公園より1新種を見いだしたので，本属3番目の種として記載した．本種は同じくマレー半島から記載された本属のタイプ種，*A. giraffa*によく似ているが，上翅会合部基部に小盾板が露出する，上翅基部に不明瞭ながら1対の孔点を備える，第4腹板基部突起に半円形の突出部を欠く，雄交尾器の構造が異なる，などの点により明らかに区別できる．タイプ標本となった2頭はいずれも熱帯雨林内に設置したFIT（フライト・インターセプト・トラップ）によって採集された.

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